What is claimed is:

1. A method of recovering hydrocarbons from a subterranean reservoir, the method comprising:

(a) drilling an injection well bore into the subterranean reservoir, the injection well bore having an outlet;

(b) drilling a production well bore into the subterranean reservoir, the production well bore being spaced apart from the injection well bore and having an inlet;

(c) forming a permeable zone comprising a first patterned web of channels radiating outwardly from the outlet of the injection well bore and connecting to a second patterned web of channels radiating outwardly from the inlet of the production well bore in the subterranean reservoir; and

(d) flowing a heated fluid from the outlet of the injection well and into the permeable zone to mobilize hydrocarbons in the subterranean reservoir so that the mobilized hydrocarbons flow toward the inlet of the production well bore.

2. A method according to claim 1 wherein (c) comprises forming a permeable zone having a predetermined shape that induces gravity drainage of the mobilized hydrocarbon towards the inlet of the production well bore.

3. A method according to claim 1 wherein (c) comprises forming the permeable zone about a plane that is angled downwardly from the injection well bore to the production well bore.

4. A method according to claim 3 wherein (c) comprises forming a permeable zone that is angled downwardly with an angle of from about 5 degrees to about 20 degrees.

5. A method according to claim 1 wherein (c) comprises forming a permeable zone having first and second patterned webs of channels that fan out from the injection and production well bores towards an interior region of the reservoir between the injection and production well bore, and wherein the first and second patterned web of channels are connected at the interior region.

6. A method according to claim 1 wherein (c) comprises forming a permeable zone that fans out from at least one of the injection and production well bores at a horizontal angle of from about 30 degrees to about 60 degrees.

7. A method according to claim 1 wherein (c) comprises forming a permeable zone having a convoluted path between the injection well bore and production well bore.

8. A method according to claim 1 comprising forming a plurality of injection well bores and production well bores that are disposed about the intersection points of a grid pattern.

9. A method according to claim 1 comprising forming two injection well bores and two production well bores that are disposed at the vertices of a square, the injection well bores lying on a first diagonal and the production well bores lying on a second diagonal of the square, and further comprising forming permeable zones that pass through an interior region of the square to connect outlets and inlets of the injection and production well bores.

10. A method according to claim 1 wherein (d) comprises flowing a heated fluid comprising an oxygen-containing gas into the permeable zone.

11. A method of recovering hydrocarbons from a subterranean reservoir, the method comprising:

(a) drilling injection and production well bores into the subterranean reservoir so that alternating injection and production well bores are disposed at intersection points of a grid pattern, the grid pattern comprising squares with diagonally facing injection wells bores and diagonally facing production wells bores, wherein the injection well bores comprise outlets and the production well bores comprise inlets;

(b) forming one or more permeable zones that connect facing pairs of outlets of the injection well bores and facing pairs of inlets of the injection well bores in the subterranean region; and

(c) flowing a heated fluid from the outlets into the permeable zones to fluidize hydrocarbons in the subterranean reservoir so that the fluidized hydrocarbons flow toward the inlets of the production well bores.

12. A method according to claim 11 wherein in (b) the permeable zones are spaced apart from one another in the grid pattern by unexcavated reservoir regions.

13. A method according to claim 11 wherein in (b) the permeable zones comprise triangular sections that fan out with increasing width from each well bore.

14. A method according to claim 13 wherein in (b) each triangular section covers an angle of from about 30 to about 60 degrees.

15. A method according to claim 14 wherein diagonally opposing triangular sections abut together along a base of each triangle about a center of the square.

16. A method according to claim 11 wherein (c) comprises flowing a heated fluid comprising an oxygen-containing gas into the permeable zones.

17. A method of recovering hydrocarbons from a subterranean reservoir, the method comprising:

(a) drilling a substantially vertical well bore into the subterranean reservoir, the well bore having an outlet;

(b) forming a permeable zone comprising a patterned web of channels radiating outwardly from the outlet of the injection well, the permeable zone extending upwardly from the well bore into the subterranean reservoir at an angle of at least about 5 degrees; and

(c) flowing a heated fluid into the permeable zone to mobilize hydrocarbons in the subterranean reservoir so that the mobilized hydrocarbons flow toward the outlet of the well bore

18. A method according to claim 17 wherein (b) comprises forming a permeable zone that fans out from the well bore at a horizontal angle of from about 30 degrees to about 60 degrees.

19. A well pattern to recover hydrocarbons from a subterranean reservoir, the well pattern comprising:

an injection well bore extending into the subterranean reservoir, the injection well bore comprising an outlet;

an injection fluid supply to supply a heated fluid to the subterranean reservoir via the outlet;

a production well extending into the subterranean reservoir, the production well being spaced apart from the injection well and having a inlet; and

a permeable zone in the subterranean reservoir comprising a first patterned web of channels radiating outwardly from the outlet of the injection well and connecting to a second patterned web of channels radiating outwardly from the inlet of the production well in the reservoir, whereby the heated fluid flows from the outlet into the permeable zone to mobilize hydrocarbons in the subterranean reservoir so that the mobilized hydrocarbons flow toward the inlet of the production well.

20. A well pattern according to claim 19 wherein the permeable zone is angled downwardly from the injection well bore to the production well bore at an angle of from about 5 degrees to about 20 degrees.

21. A well pattern according to claim 19 wherein the permeable zone fans out from at least one of the injection and production well bores at an angle of from about 30 degrees to about 60 degrees.

22. A well pattern according to claim 19 wherein the permeable zone has a convoluted path between the injection and production well bores.

23. A drilling tool capable of drilling a permeable zone in a subterranean reservoir, the drilling tool comprising:

a drill head capable of being inserted into a well bore, the drilling head being capable of drilling a permeable zone that fans out from the well bore at an angle of from about 30 degrees to about 60 degrees; and

a power source to supply power to the drill head.

24. A drilling tool according to claim 23, wherein the drill head is capable of drilling the permeable zone such that the permeable zone is upwardly or downwardly angled at least about 5 degrees.

25. A drilling tool according to claim 23, wherein the drill head is capable of drilling multiple conduits fanning out from the well bore.